

DIO8652

Single Stage Flyback & PFC Controller With Primary Side Control For LED Lighting

Features

- Primary side control eliminates the opto-coupler
- Valley turn-on of the primary MOSFET to achieve lower switching losses
- Power factor >0.95@230VAC
- THD<10%@230VAC
- Reliable short LED and Open LED protection
- Quick start up:<500ms
- Low start up current:15µA typical
- External thermal regulation
- Package: SOIC-8

Descriptions

The DIO8652 is a single stage Flyback and PFC controller targeting at LED lighting applications.

The DIO8652 is a primary side controller without applying any secondary feedback circuit for low cost, and drives the Fly back converter in the quasi-resonant mode to achieve higher efficiency.

The DIO8652 keeps the Flyback converter in constant on time operation to achieve high power factor.

This chip adopts special design to achieve quick start up and reliable protection for safety requirement.

Applications

- LED Lighting

Block Diagram

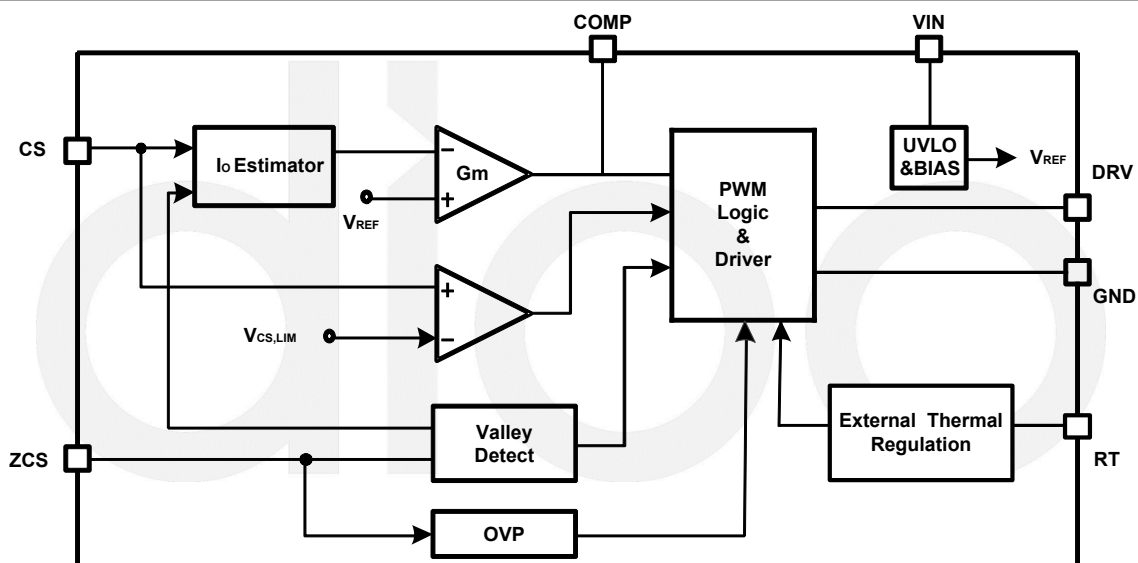


Figure1 Block Diagram



DIO8652

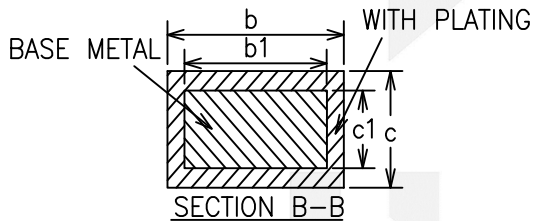
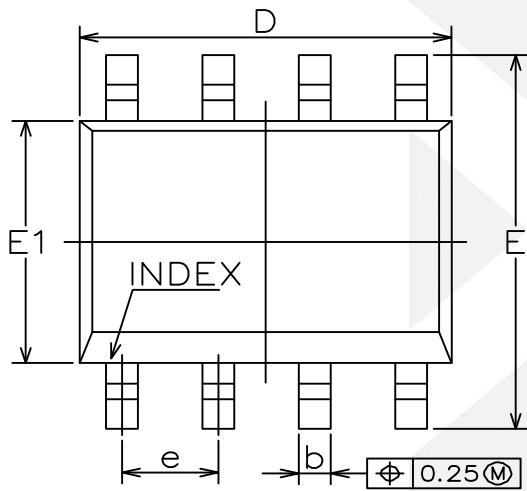
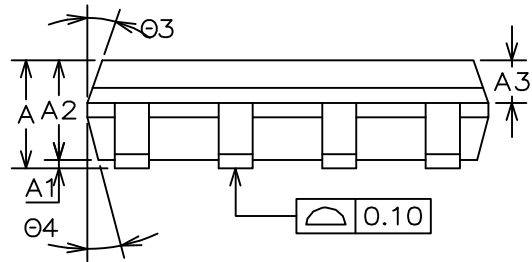
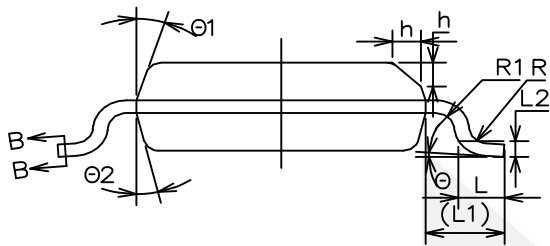
Ordering Information

Order Part Number	Top Marking		T _A	Package	
DIO8652CS8	DIO8652	Green	-40 to +85°C	SOIC-8	Tape & Reel, 2500

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Physical Dimensions: SOIC-8



COMMON DIMENSIONS (UNITS OF MEASURE=MILLIMETER)			
Symbol	MIN	NOM	MAX
A	1.35	1.55	1.75
A1	0.10	0.15	0.25
A2	1.25	1.40	1.65
A3	0.50	0.60	0.70
b	0.38	-	0.51
b1	0.37	0.42	0.47
c	0.17	-	0.25
c1	0.17	0.20	0.23
D	4.80	4.90	5.00
E	5.80	6.00	6.20
E1	3.80	3.90	4.00
e	1.27BSC		
L	0.45	0.60	0.80
L1	1.04REF		
L2	0.25BSC		
R	0.07	-	-
R1	0.07	-	-
h	0.30	0.40	0.50
theta	0°	-	8°
theta1	15°	17°	19°
theta2	11°	13°	15°
theta3	15°	17°	19°
theta4	11°	13°	15°

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CONTACT US

Dioo is a professional design and sales corporation for high-quality and performance analog semiconductors. The company focuses on industry markets, such as, cell phone, handheld products, laptop, and medical equipment and so on. Dioo's product families include analog signal processing and amplifying, LED drivers and charger IC. Go to <http://www.dioo.com> for a complete list of Dioo product families.

For additional product information, or full datasheet, please contact with our Sales Department or Representatives.

